NGB FOOTPRINT FOR TRAINING TRANSFORMATION and ADVANCED DISTRIBUTED LEARNING

4 OCT 04

Co-Lab History

- Both projects based at the Co-Lab
- Early 90's OSD looking for ways to leverage DL to reduce resident training
- Study results indicated that DL was time and cost prohibitive due to long ramp-up time for course development and update as well as incompatibility of Learning Management Systems
- Proliferation of the Internet changed the playing field and in 1997 OSD launched the Advanced Distributive Learning initiative

ADL Concept

- Bringing together DoD and other Federal agencies, academia and the DL industry to create a community of interest for development of standards and technology which would allow faster development time and interoperative technology

- OSD provided existing space on the campus of IDA and construction of the Collaborative Laboratory, or Co-Lab began in the Fall of 1999 under the direction of OSD Office of Readiness & Training

- The intent was to create a neutral, non-DoD facility which would provide stakeholders a place to meet, discuss, develop and test new DL standards and technology

SCORM

- ADL stakeholders, the DL community and international standards organizations, i.e. ISO 9000 and IEEE came together an began developing the Sharable Content Object Reference Model

- Lead partners: DoD; NGB and DoL

- SCORM compliant content would allow parts of one or more courses to be quickly “chunked” and combined to form new or updated courseware

- SCORM compliant equipment such as LMS’ would allow courseware and content to be shared between organizations

ADL Today

- Co-Labs:
  - ADL Co-Lab (Alexandria, VA)
  - Joint Co-Lab (Orlando, FL)
  - Academic Co-Lab (Madison, WI)

- Partnership Lab(s):
  - United Kingdom
  - University of Memphis FedEx Institute of Technology
  - Proposed: Canada, Japan, Singapore, Italy

ADL Today (cont.)

- SCORM:
  - January 2004 release of SCORM 2004 (formerly SCORM 1.3)
- Buy-in has been achieved—SCORM is the recognized industry standard
- Future:
  - Dr. Robert Wisher appointed Director of ADL September 2003
  - Commitment of Mr. Dan Gardner, Director, Readiness and Training Policy and Programs, OSD
  - Program in POM through 2008
  - Now discussing among stakeholders who will lead ADL in future

Training Transformation

- Relatively new program out of OSD R & T—mainly based at the Co-Lab
- There are three capabilities that form the foundation for Training Transformation.
- Training Transformation will provide dynamic, capabilities-based training for the Department of Defense in support of national security requirements.
- The Training Transformation Implementation Plan provides a systematic and ongoing process for the transformation.
- Combatant commanders--the ultimate focal points for joint operations--will receive better, prepared forces that are aligned with their needs

Training Transformation / T2

- Capabilities Driven
- Joint Driven
- Combatant Command Driven

Training Transformation / T2 (cont.)

- Capabilities:
  - *Training Individual Leaders* --- Joint Knowledge Development and Distribution Capability (JKDDC; Mr. Dave Evans, JCS) – FY'04 = $16.2M
  - *Training Command Staffs and Units* --- Joint National Training Capability (JNTC; CAPT Tank Thorp, USN, JFCOM) – FY'04 = $135.7M
  - *Evaluating* --- Joint Assessment and Enabling Capability (JAEC; Mr. Fred Hartman, OSD) – FY'04 $17.1M
- Future:
  - NGB key member of the JKDDC Working Group
  - Inclusion in this group offers greater possibility of DTTP/GuardNet XXI to become vehicle for content delivery and simulations
  - Out-Year Budget Concerns—concept calls for funding of $1B

Joint Knowledge Development & Distribution Capability

- Will prepare future decision-makers and leaders to employ joint operational art
- Understand the common relevant operating picture, and respond innovatively to adversaries.
- It will develop and distribute joint knowledge via a dynamic, global-knowledge network
- Provides immediate access to joint education and training resources.

JKDDC Chain-of-Command

Maj Gen Jack J. Catton, USAF
Director, OP Plans & Joint Force Development, J-7
JCS

COL Walt Gilliam, USA
Chief, Joint Doctrine, Education and Training

Mr. Dave Evans
Director, JKDDC Joint Management Office

Joint National Training Capability

- Will prepare forces by providing command staffs and units with an integrated live, virtual, and constructive training environment

- Will include appropriate joint context, and allow global training and mission rehearsal in support of specific operational needs.

JNTC Chain-of-Command

- ADM E.P. Giambastiani, USN
  CDR JFCOM

- MG Gordon Nash, USA
  CDR, Joint Warfighting/J-7

- CAPT Mark Sterns, USN
  Deputy JW/J-7

- CAPT Howard “Tank” Thorpe, USN
  Director, JNTC JMO

Joint Assessment and Evaluation Capability

- Will assist leaders in assessing the value of transformational initiatives on individuals, organizations, and processes

- Will also provide essential support tools and processes to enable and enhance the Joint Knowledge Development and Distribution Capability and the Joint National Training Capability

JAEC Chain-of-Command

- Dr. David Chu
- USD- Personnel & Readiness

- Dr. Paul Mayberry
- DUSD- Readiness

- Mr. Dan Gardner
- OSD Readiness & Training

- Mr. Fred Hartman
- Director, JAEC

The NGB Co-Lab Role

- Training Development--Distance Learning, Network and Classroom SME's
- Testing New Developments—Network & Classroom Labs
- Delivery of Content—GuardNet XXI & GCLS Portal

Summary

- Both projects wide-ranging
- NGB support for ADL shifting more to data warehousing and simulation
- NGB technical support for T2 has excellent potential for involvement in testing and delivering new technology/content—especially simulations
- Proximity to T2 provides high-level visibility of NGB assets and potential

NGB Co-Lab
Technical Support Role

- 2 FTEs—Manager and Site Admin/CR Engineer
- Manage the technical infrastructure of NGB DL Classrooms and labs at the ADL Co-Laboratory
- Primary liaison with Co-Lab support vendors with regard to technical infrastructure, plant and facility issues and LAN/WAN connectivity
- Oversee and monitor all NGB Co-Lab Test and Evaluation projects
- Technical and operational adviser to NGB J-6, Deputy Chief of Joint IT Projects

NGB Co-Lab Resources

- **The MMS 450** (First Floor)
- This classroom has 3 student workstations and an instructor work station which functions as the control station.

- **The MMS 400XP** (Sixth Floor lab, South)
- This classroom has two student work stations and one instructor workstation. application suite. This is the only 400XP classroom as it was the Alpha Test site for the Windows 95 Migration project.
- Classroom Site Administrator's office is in this room.

- **The MTC 600** (Sixth Floor lab, North)
- This classroom is partitioned from the MMS400 classroom and has 2 student seats and one instructor seat. This classroom is one of the most recent iterations which are currently being fielded to retro-fit earlier version classrooms.

- **Network Lab** (Sixth Floor lab, North)
- This lab formerly housed the network STARC and Hub equipment which emulated the GuardNet XXI configuration.
- Site for new Cisco IP network lab
- Servers for the ADL test-bed and the T2 Simulation Project are located in this room
- This area, also, houses the lab classroom server racks as well as the termination point of the Co-Lab WarriorNet (ANG) satellite Downlink

Past Testing Conducted

- **ABCS POP3** —Army Battle Command System Proof of Principle testing in conjunction with DISA and other DoD entities. Tests involve remote access to command systems and interoperability of software, hardware and connectivity protocols.
- **GuardNet XXI FIREWALL RULES**—This project sought to mitigate known firewall vulnerabilities in GuardNet XXI. The project tested re-engineering solutions which implemented rules which brought NGB-AIS into compliance with DoD security policies.
- **P4 SCP**—Testing of an Enterprise Management System product integration. This product is intended to provide redundant switch control as well as the ability to proactively monitor switch failures across GuardNet XXI.
- **GuardNet XXI OPTIMIZATION PROGRAM**—This project is designed to expand bandwidth to support an update of network architecture.
- **NASA**-- NASA's Education Division has been developing educational programs to generate interest in math and science among middle- and high-school students, and to attract them to careers in these fields. The NGB has entered into a partnership with NASA to facilitate and test remote delivery of these programs using the Co-Lab as a base of network operations.
- **UK—** The NGB and the Co-Lab entered into an agreement with the United Kingdom's cabinet office of E-Learning. One of the goals of the initiative is to promote development and acceptance global E-Learning standards, thus facilitating the exchange content and lessons-learned.
- **WIN95 MIGRATION**—Tested form, fit and function of an engineering solution to migrate Operating Systems in older DTTP classrooms from Windows 95 to Windows XP thus facilitating the use of state of the art course software.
- **MR4 TESTING**—Tested engineering solutions introduced in Maintenance Release 4 of the Guard Content Learning System which is a new courseware management system supporting DTTP. GCLS is intended to enhance the use of courseware and other services.

Current Projects

- Lab classroom conversion to Simulation friendly configuration
- JCS NIPRNET Connectivity Project
- "ADL and T2 Server rack config, cut-over and server re-config
- DITSCAP testing in 400& 600 CR’s
- VTC/Event testing w/Shared Use partners, i.e. UK Partnership lab, OK CST, NASA, FBI and various DHS entities
- T2 JKDDC Network Integration Action Team leadership
- Stand-alone print server for RCAS workstations
- Design and construction of Cisco IP Network lab

Discussion

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